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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,986	01/30/2001	Kon-Hee Lee	1081.39543X00	8460
20457	7590	10/27/2003	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			PAN, YUWEN	
			ART UNIT	PAPER NUMBER
			2682	

DATE MAILED: 10/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,986

Applicant(s)

LEE ET AL.

Examiner

Yuwen Pan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al (US006115592A).

With respect to claim 1, Ueda discloses a first switching portion for selecting any one of an upper band pass filter and a lower band pass filter that are operated by the band selecting portion (see figure 1 and item 18, figure 23 and column 18 and line 63-column 19 and line 10);

An amplifying portion (see figure 2 and item 9) for amplifying a receiving signal passed through the switching portion; a second switching portion (see figure 1 and item 20 figure 23 and column 18 and line 63-column 19 and line 10) for switching the receiving signal amplified at the amplifying portion according to the operating signal of the band selecting portion to select on supplying it to an upper band filter or a low band pass filter of a second filter;

A mixer for mixing the receiving signal passing through the second filter with a local oscillating frequency for a local oscillator (see figure 14 and items 74 and 77);

A transmit mode determining portion for determining/transmitting a transmit frequency according to a signal outputted from the band selecting portion in which is the SW (see figure 14 and column 11 and lines 21-39);

The baseband signal processor unit, SW and phase-locked loop circuit constitute the functionality of selecting portion for switching a communication system in a waiting mode into master, a controller for determining a transmit-receive frequency according to the operating of the selecting portion and generating a control signal; a band selecting portion for selecting an inputting signal of an upper band or a lower band of a receiving signal passing through an antenna and a duplexer according the control signal of the controller (see column 11 and line 55-column 12 and line 4, column 18 and line 63-column 19 and line 10)

Ueda further teaches a demodulator unit but Ueda doesn't teach a filtering portion for filtering an intermediate frequency from the mixed frequency. The examiner takes "Official Notice" of the fact that is notoriously well-known in the art to pass an IF to an IF filter, in order to filter out unnecessary frequency such as noise.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to have the IF filter such that only required information would be passing through.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Ueda et al (US006115592A).

Ueda teaches a transmit-receive switching method comprising steps of:

Determining whether the communication system is a master or slave, if the communication device initial a call in which acts as a master, it would automatically switch to the transmit channel either one of f1 or f2, performing the transmit-receive operating at a state determined by the first transmit-receive channel switch step (see column 18 and lines 56- column 19 and line 10); if the communication device receive a call in which acts as a slave, it would switching the transmit-receive channel automatically to place the transmit channel on the frequency channel different from the received frequency channel (see column 2 and line 59-column 3 and line 27).

Ueda doesn't expressly teach to judge whether the transmit-receive operating is finished and switching the transmitting-receiving mode into the waiting mode if finished. However it is inherent to judge whether the transmit-receive operating is finished and switching the transmitting-receiving mode into the waiting mode if finished because in any kind of radio communication system, because the terminal device always transmit or receive during certain predetermined duration time and switch to idle or waiting mode during non-transmitting or non-receiving for the purpose of saving battery power.


Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 703-305-7372. The examiner can normally be reached on 8-5 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


Yuwen Pan
October 20, 2003


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

10/20/03